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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/756,675	01/13/2004	Rudolf Neumann	057517/0053	2578

29619 7590 09/30/2004

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EXAMINER	
FRANK, RODNEY T	
ART UNIT	**PAPER NUMBER**
2856	

DATE MAILED: 09/30/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/756,675	NEUMANN, RUDOLF	
	Examiner	Art Unit	
	Rodney T. Frank	2856	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) 1-25 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) 1-25 is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date 01/13/2004.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless -
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1-4, 9, 10, 15, 17, 19, and 21 are rejected under 35 U.S.C. 102(e) as being anticipated by Jennings et al. (U.S. Patent Number 6,530,143; hereinafter referred to as Jennings). Jennings discloses a gap setting apparatus incorporates an air gage to measure the pressure drop (and indirectly the flow rate) of air through a gap of a hydrodynamic bearing, while facing sections of the bearing are moved closer together. The measured pressure drop can be correlated to the actual bearing gap and monitored to determine when the proper gap has been achieved. More particularly, the inner and outer elements of the bearing are clamped in separate carriers and are held in place. The carriers are then moved toward one another so that the inner or shaft portion of the bearing slides into the outer or sleeve portion of the bearing. To accurately set the gap between the two, an air hose with an air gage attached to it is attached to one end of the bearing gap; air is pumped through the bearing gap, exiting through the opposite end of the gap, By testing a set of reference motor parts, a high end and a low end of an acceptable bearing gap range can be established, and the corresponding air gage readings obtained. Thus, once the air gage has been calibrated against a minimum and maximum gap, each motor can be assembled with the proper

gap by simply adjusting the relative position of the parts until a target air gage reading or a reading between the high and low end of an acceptable range is obtained (Please see the abstract).

3. In reference to claim 1, Jennings discloses a method of verifying a bearing gap between a shaft and a shaft seat of a hydrodynamic bearing, comprising the steps of positioning the shaft into its functional position within the shaft seat of a test bearing, causing a measuring fluid to flow through the bearing gap; and measuring one or more parameters characterizing the through-flow of the fluid through the bearing gap. This is disclosed in column 3 lines 35-65 of the Jennings reference.

In reference to claim 2, the method according to claim 1, wherein the verification is performed before final assembly of the hydrodynamic bearing is disclosed in column 3 lines 40-43 where Jennings discloses an air gauge is connected to one end of the pieces of the bearing to be assembled.

In reference to claim 3, the method according to claim 1, wherein the verification is performed before a lubricant is introduced into the bearing gap is disclosed since there is no mentioning of adding a lubricant to the bearing in any of the testing procedures described in Jennings.

In reference to claim 4, the method according claim 1, wherein the measuring fluid is a gaseous measuring fluid is disclosed since Jennings uses air.

In reference to claims 9 and 10, since Jennings is disclosed to measure a pressure drop, then there has to be some initial pressure that is known in order to measure a drop in pressure. Also, since a pressure drop is measured, a difference in pressure is measured.

In reference to claim 15, Jennings discloses classifying a test bearing in terms of a minimum and maximum gap obtained.

In reference to claim 17, a device to verify a bearing gap between a shaft and a shaft seat of a test hydrodynamic bearing, said device comprising an admission device to introduce measuring fluid into the bearing gap of the test bearing, and a measuring device to measure at least one parameter characterizing the fluid through-flow through the bearing gap is disclosed in Jennings as discussed above.

In reference to claim 19, the device according to claim 17, wherein the measuring device includes at least one pressure sensor is disclosed since the device measures pressure drop, a pressure is being measured.

In reference to claim 21, the device according to claim 19, wherein at least one pressure sensor measures a pressure difference between a start pressure of measuring fluid introduced into said bearing gap and a resulting pressure of through-flow measuring fluid emerging from the bearing gap is disclosed since the measurement of a pressure drop is disclosed.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. Claims 5-8, 11-14, 16, 18, 20, and 22-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jennings et al.

6. In regard to claims 5-8, though these claims are not explicitly disclosed in the Jennings reference, these claim limitations are viewed as a mere design choice as they are not disclosed to give any improvement upon, nor any unexpected result over the prior art.

In regard to claims 11-12, these limitations of the testing procedure are not specifically disclosed in the Jennings reference. However, these claim limitations are viewed as a mere design choice as they are not disclosed to give neither any improvement upon nor any unexpected result over the prior art.

In regard to claims 13 and 14, these limitations of the positioning of the shaft are not specifically disclosed in the Jennings reference. However, these claim limitations are viewed as a mere design choice as they are not disclosed to give neither any improvement upon nor any unexpected result over the prior art.

In regard to claim 16, the exact method by which results are determine are not disclosed, but utilizing quasi-stationary conditions would be an obvious parameter to determine results for such a test by one of ordinary skill in the art.

In regard to claim 18, though the use of a pressure reducer is not disclosed, in order to calibrate a device to measure pressure drop, it would be an obvious by one of ordinary skill in the art to use a pressure reducer.

In regard to claim 20, it is well established that the position or arrangement of a component wherein the position or arrangement of the component does not give any disclosed improvement upon nor unexpected result over the prior art is not a patentable feature of a device. Therefore, the arrangement of the pressure sensor is not deemed a patentable feature of the present invention.

In regard to claim 22, though it is not specifically disclosed that the gas feeding device seals the bearing gap, since you are measuring pressure, it would be obvious to provide such a seal.

In regard to claims 23-25, though the specific limitations of the claims here are not specifically disclosed in Jennings, these claim limitations are viewed as a mere design choice as they are not disclosed to give any improvement upon nor any unexpected result over the prior art.

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The examiner has cited various references that are deemed relevant to the general state of the art.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Rodney T. Frank whose telephone number is (571) 272-2193. The examiner can normally be reached on M-F 9am -5:30p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hezron E. Williams can be reached on (571) 272-2208. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

RTF
September 25, 2004

HEZRON WILLIAMS
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2800